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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,652	07/09/2003	Kristian DiMatteo	1001.1309.103	9311
28/075 7590 05/27/2009 CROMPTON, SEAGER & TUFTE, LLC 1221 NICOLLET AVENUE SUITE 800 MINNEAPOLIS, MN 55403-2420				
EXAMINER				
YABUT, DIANE D				
ART UNIT		PAPER NUMBER		
3734				
MAIL DATE		DELIVERY MODE		
05/27/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/615,652

Applicant(s)

DIMATTEO, KRISTIAN

Examiner

DIANE YABUT

Art Unit

3734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20, 22, 24-26, 34-37 and 39-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20, 22, 24-26, 34-37 and 39-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/25/2009 has been entered.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 20, 22, 25-26, 34-36, and 39-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ravenscroft et al.** (U.S. Patent No. **6,007,558**) in view of **Vargas et al.** (U.S. Patent No. **6,419,681**).

Claims 20, 22, 25, 34, and 39-44: Ravenscroft et al. discloses a conically-shaped filtering basket including an apex, comprising a body member **12**, a plurality of struts including a proximal end region and a distal end region, the plurality of struts, or arms,

26 that are substantially straight and have a distal (or first) end region and a proximal (or second) end region wherein the proximal end region is fixedly attached to the body member with the struts extending therefrom, each arm including a joined end fixedly attached to the apex, and a plurality of anchoring members **28** disposed adjacent the distal end region of at least some of the plurality of struts or on a distal end of each of the struts, and a weakened region, or reduced cross-sectional area region, **30** defined in each of the struts adjacent the anchoring member, coupling the anchoring member to the distal end region of at least some of the plurality of struts (Figures 1-2).

Ravenscroft et al. discloses the claimed device except for a weakened or reduced cross-sectional area region being configured to fail, releasing the anchoring member from a stem portion **12**.

Vargas et al. teaches a device comprising a plurality of struts each having a weakened region or reduced cross-sectional area ("frangible") region **402** being configured to fail, before the plurality of struts fail, leading to separation from the device body of struts, or a means for releasing the anchoring member that releases the portion **406** from the portion **404** containing of the plurality of struts (Figure 22; col. 13, line 22 to col. 14, line 31). The weakened region **402** is directly coupling the anchoring members (characterized by portion **404**) to the distal end region of at least some of the plurality of struts or arms (characterized by ref **424**). The reduced cross-sectional area **402** is considered to be disposed between the arms and the anchoring members.

It would have been obvious to one of ordinary skill in the art at the time of invention to provide a weakened region configured to fail to release the anchoring

members in Ravenscroft et al., as taught by Vargas et al., in order to avoid any kind of disturbance to the vessel wall in case of excessive or unexpected growth of the endothelium layer. Also, weakened, reduced cross-sectional area, or “frangible” regions are commonly used in the art to facilitate removal of delivery devices from the devices being delivered.

Claim 26: Ravenscroft et al. discloses the struts having bends **42** (Figure 10).

Claims 35-36: Ravenscroft et al. discloses the reduced cross-sectional area region **30** defined by a notch or divet, wherein a “notch” and a “divet” are both understood as meaning an “indentation” (Figure 2).

3. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Ravenscroft et al.** (U.S. Patent No. **6,007,558**) and **Vargas et al.** (U.S. Patent No. **6,419,681**), as applied to Claim 20 above, and further in view of **El-Nounou et al.** (U.S. Patent No. **5,242,462**).

Claim 24: Ravenscroft et al. and Vargas et al. disclose the claimed device except for the body member including a bore.

El-Nounou et al. teaches a filter device with a body member **62** having a bore **68** which is beneficial in receiving a guidewire during manipulation of the filter (Figure 7 and col. 4, lines 51-53, col. 2, lines 35-42). It would have been obvious to one of ordinary skill in the art at the time of invention to provide a bore in the body member, as taught by El-Nounou et al., to Ravenscroft et al. and Vargas et al. in order to manipulate the filter device by a guidewire or hook.

4. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Ravenscroft et al.** (U.S. Patent No. **6,007,558**) and **Vargas et al.** (U.S. Patent No. **6,419,681**), as applied to Claim 34 above, and further in view of **Ambrisco et al.** (U.S. Patent No. **6,007,557**).

Claim 37: Ravenscroft et al. and Vargas et al. discloses the claimed device except for the reduced-cross sectional area being defined by an opening in the strut.

Ambrisco et al. teaches a reduced cross-sectional area defined by an opening **318** in a strut **312** which can be useful in allowing a guidewire or hook to pass through for manipulation of the filter device (Figure 36C and col. 20, lines 1-15). It would have been obvious to one of ordinary skill in the art at the time of invention to provide an opening in the strut, as taught by Ambrisco et al., to Ravenscroft et al. and Vargas et al. in order to manipulate the filter device by a guidewire or hook.

Response to Arguments

5. Applicant's arguments filed 02/25/2009 have been fully considered but they are not persuasive.
6. The applicant argues that altering the hooks of the Ravenscroft device with the weakened regions taught in Vargas would be impermissible, because the structure of the hooks is important to the principle of operation of the invention. However, this does not render the modification unobvious, and as mentioned above, it would have been obvious to one of ordinary skill in the art to modify the filter device of Ravenscroft with the weakened or frangible regions of Vargas in order to avoid any kind of disturbance to

the vessel wall in case of excessive or unexpected growth of the endothelium layer.

Also, weakened, reduced cross-sectional area, or “frangible” regions are commonly used in the art to facilitate removal of delivery devices from the devices being delivered.

7. Applicant also argues that the examiner mischaracterizes Vargas since it is a single fixed device rather than a device with multiple struts having a distal tip configured to act as an anchor. However, as seen in Figure 22 of Vargas multiple elements connected together are defined in the device with multiple weakened portions **402** (also seen in Figure 23), wherein the weakened portions separate the implant **404** or “anchoring members” and the discard portion **406** or “struts” or “distal end region” of the device (col. 14, lines 28-31), which suggests facilitation of withdrawal of a device or a portion of a device if desired. In other words, modifying the anchoring members of Ravenscroft with weakened or breakable regions would have suggested to those of ordinary skill in the art that retrieval of the filter would be facilitated without disturbing the vessel wall.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIANE YABUT whose telephone number is (571)272-6831. The examiner can normally be reached on M-F: 9AM-4PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on (571) 272-4713. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Diane Yabut/
Examiner, Art Unit 3734

/Todd E Manahan/
Supervisory Patent Examiner, Art Unit 3734